

AMENDMENTS TO THE CLAIMS

1.(currently amended): A call setting method for a network system ~~comprising, the~~
network system including a first line switching network as a line switching network on a call-out
side, a first gateway connected with ~~said the~~ first line switching network, an internet protocol
(IP) [[IP]] packet network connected with ~~said the~~ first gateway, ~~a plurality of~~ second gateways
respectively connected with ~~said the~~ IP packet network, and a second line switching network as a
line switching network on a call-in side connected with each of ~~said the~~ second gateways,
[[wherein]] said method comprising:

~~said the~~ first gateway, when a call is set between ~~said the~~ first line switching
network and ~~said the~~ second line switching network through ~~said the~~ IP packet network, ~~receives~~
receiving a call setting message from ~~said the~~ first line switching network;

~~said the~~ first gateway ~~transmits~~ transmitting a call-in enable/disable inquiry
message to the IP packet network to ~~specify~~ select one of the [[a]] second gateway gateways
which can communicate the call setting message from the first gateway to the second line
switching network; the call-in enable/disable inquiry message is received by at least one of ~~said~~
the second gateways through ~~said the~~ IP packet network;

each of the said second gateway gateways ~~from which received~~ when receiving
the call-in enable/disable inquiry message, ~~if said~~ judging whether the second gateway itself can
communicate [[a]] the call setting message to ~~said the~~ second line switching network[[,]] so that
each of the second gateways transmits a call-in enable/disable inquiry response message to ~~said~~
the first gateway only when it is judged that the second gateway itself can communicate the call

setting message to the second line switching network, the call-in enable/disable inquiry response message is received by the first gateway through the IP packet network; and

~~said the first gateway selects a selecting one of the second gateway gateways for transmitting the call setting message within at least one of said second gateways to which transmitted transmitting the call-in enable/disable inquiry response message message, and transmits transmitting the call setting message to said the selected second gateway.~~

2.(currently amended): A call setting method for a network system according to claim 1, wherein ~~said the first gateway selects [[a]] one of the second gateways gateway in which corresponding to a source of the call-in enable/disable inquiry response message arrived arriving at said the first gateway first.~~

3.(currently amended): A call setting method for a network system according to claim 1, wherein the first gateway multicasts the call-in enable/disable inquiry message toward the second gateways;

each of ~~said the~~ second gateways participates or leaves with respect to a multicast group for receiving the multicast call-in enable/disable inquiry message, dynamically; and

the multicast call-in enable/disable inquiry message is given only to [[a]] each of the second gateway gateways which ~~have been~~ is participating in the multicast group.

4.(currently amended): A call setting method for a network system according to claim 3, wherein each of ~~said the~~ second gateways[[,]] leaves from the multicast group if ~~said the~~ second

gateway itself cannot communicate ~~[[a]]~~ the call setting message ~~transmitted~~ from ~~said~~ the first gateway to ~~said~~ the second line switching network, ~~leaves from the group.~~

5.(currently amended): A call setting method for a network system according to claim 3, wherein each of ~~said~~ the second gateways~~[[,]]~~ participates in the multicast group if ~~said~~ the second gateway itself can communicate ~~[[a]]~~ the call setting message ~~transmitted~~ from ~~said~~ the first gateway to ~~said~~ the second line switching network, ~~participates in the group.~~

6.(currently amended): A call setting method for a network system according to claim 1, ~~wherein said network system further comprising: a third gateway connected with said IP packet network, a third line switching network respectively connected with said third gateway and said second line switching network;~~

~~said~~ the first gateway, when the first gateway cannot receive the call-in enable/disable inquiry response message from all ~~said~~ the second gateways, ~~transmits~~ transmitting the call setting message to ~~said~~ a third gateway, the third gateway linking the IP packet network and a third line switching network, the third line switching network is connected to the second line switching network;

~~said~~ the third gateway, when ~~receives~~ receiving the call setting message from ~~said~~ the first gateway, ~~transmits~~ transmitting the call setting message to ~~said~~ the third line switching network; and

~~said~~ the third line switching network, when ~~receives~~ receiving the call setting message from ~~said~~ the third gateway, ~~transmits~~ transmitting the ~~received~~ call setting message to ~~said~~ the second line switching network.

7.(currently amended): A call setting method for a network system according to claim 1, ~~wherein said network system further comprising: a plurality of third gateways connected with said IP packet network, a third line switching network respectively connected with each of said third gateways and said second line switching network;~~

~~said the first gateway, when the first gateway cannot receive the call-in enable/disable inquiry response message from all said the second gateways, transmits transmitting the call-in enable/disable inquiry message to said IP packet network; network,~~
the call-in enable/disable inquiry message is received by at least one ~~of said third gateways~~ gateway, each of which is connected to the IP packet network, through said IP packet network, each third gateway linking the IP packet network and a third line switching network, the third line switching network is connected to the second line switching network;

each of said the third gateways when receiving ~~gateway from which received the~~ call-in enable/disable inquiry message, if ~~said the third gateway itself can communicate a the call setting message from the first gateway to said the third line switching network, transmits~~ transmitting a call-in enable/disable inquiry response message to said the first gateway;

~~said the first gateway selects a selecting one of the third gateway gateways for transmitting the call setting message within at least one of said third gateways to which transmitted transmitting the call-in enable/disable inquiry response message, and transmitting message and transmits the call setting message to said the selected third gateway;~~

the said selected third gateway, when receives receiving the call setting message from said the first gateway, transmits transmitting the call setting message to said the third line switching network; and

~~said~~ the third line switching network, when ~~receives~~ receiving the call setting message from ~~said~~ the third gateway, ~~transmits~~ transmitting the ~~received~~ call setting message to ~~said~~ the second line switching network.

8.(currently amended): A call setting method for a network system according to claim 7, wherein the first gateway multicasts the call-in enable/disable inquiry message toward the third gateways;

each of ~~said~~ the third gateways participates or leaves with respect to a multicast group for receiving the multicast call-in enable/disable inquiry message, dynamically; and

the multicast call-in enable/disable inquiry message is given only to ~~a third gateway~~ each of the third gateways which ~~have been~~ is participating in the multicast group.

9.(currently amended): A call setting method for a network system according to claim 1, wherein the first gateway ~~transmits~~ unicasts the call setting message to a specific ~~second gateway, which is one of in said~~ the second gateways gateways, through said IP packet network; and

thereafter, when ~~said~~ the specific ~~second~~ gateway cannot communicate the call setting message to ~~said~~ the second line switching network, ~~said~~ the first gateway ~~transmits~~ multicasts the call-in enable/disable inquiry message to ~~said~~ the IP packet network.

10.(currently amended): A call setting method for a network system according to claim 1, wherein ~~said~~ when the first gateway, ~~when~~ receives the call setting message from the first line switching network, the first gateway selects ~~whether to transmit~~ either unicasting the

call setting message to a specific ~~second~~ gateway, ~~which is one of in said the second gateways or~~ transmit gateway, or multicasting the call-in enable/disable inquiry message to the IP packet network.

11.(currently amended): A gateway ~~connecting with~~ connected to a first line switching network as a line switching network on a call-out side, ~~connecting with~~ and connected to a plurality of other gateways through ~~[[a]]~~ an internet protocol (IP) [[IP]] packet network, each of the other gateways is connected ~~with~~ to a second line switching network as a line switching network on a call-in side, said gateway comprising:

a receiving unit, when a call is set between the first line switching network and the second line switching network, receiving a call setting message from the first line switching network;

~~[[a]]~~ an editing unit editing, when the call setting message is received by said receiving unit, a call-in enable/disable inquiry message ~~for inquiring whether a other gateway itself can communicate the call setting message to the second line switching network or not; and~~

a transmitting unit transmitting the ~~edited~~ call-in enable/disable inquiry message to the IP packet network, the ~~edited~~ call-in enable/disable inquiry message is received by at least one of the ~~plurality of~~ other gateways through the IP packet network;

a unit to receive a call-in enable/disable inquiry response message, the call-in enable/disable inquiry response message is transmitted from each of the other gateways, which can communicate the call setting message from said gateway to the second line switching network when receiving the call-in enable/disable inquiry message;

a unit selecting one of the other gateways corresponding to a source of the call-in enable/disable inquiry response message arriving at said gateway first; and

a unit transmitting the call setting message to said one of the other gateways which is selected.

12.(canceled):

13.(currently amended): A gateway according to claim 11 further comprising:

a table for ~~holding~~ storing a multicast address ~~corresponding to a destination of the call setting message; and~~

a reading unit reading out ~~the~~ a multicast address corresponding to a call setting message, which is received from the first line switching network, from said table, ~~when said receiving unit receives the call setting message from the first line switching network, wherein~~ said editing unit edits ~~[[a]]~~ an IP packet ~~setting with~~ with the call-in enable/disable inquiry message, which is set, as a destination address, and the read ~~out~~multicast out multicast address, and

said transmitting unit ~~transmits~~ transmitting the edited IP packet to the IP packet network so that the call-in enable/disable inquiry message is received at least one of the other gateways.